

## REMARKS

Applicant submits this Amendment in reply to the Office Action dated October 24, 2003. As an initial matter, Applicant gratefully acknowledges the Examiner's indication of the allowability of the subject matter of claims 3 and 7.

In this Amendment, Applicant cancels claims 1-15, without prejudice or disclaimer, and adds new claims 16-42 to place the original claims, which were an English translation of the German language, in a form more compatible with U.S. Patent practice and obviate the various claim objections and Section 112, second paragraph rejections set forth in the Office Action. Claims 16 and 32 are the sole independent claims.

The originally-filed specification, claims, abstract, and drawings fully support the subject matter of new claims 16-42. No new matter has been introduced.

At page 2 of the Office Action, the Examiner objected to the specification for not containing an abstract on a separate sheet of paper, and also objected to the specification for various informalities. Applicant submits herewith an Abstract on a separate sheet of paper, and amends the specification to correct the various informalities. No new matter has been introduced. Accordingly, Applicant respectfully requests withdrawal of the objections to the specification.

In the Office Action, claims 1, 9, and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by German Patent No. 4102790 ("the German '790 reference"); claims 1, 2, 9, and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,577,615 to LeNoir ("LeNoir"); and claims 1, 9, 10, 11, and 15 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,730,413 to

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McDermott et al. ("McDermott"). Claim 11 also was rejected under 35 U.S.C. §103(a) as being unpatentable over either LeNoir in view of U.S. Patent No. 5,964,015 to Sear ("Sear") or the German '790 reference in view of Sear.

Applicant has cancelled claims 1-15 rendering the various rejections set forth in the Office Action moot. Insofar as the Examiner may apply these rejections to new claims 16-42, Applicant requests the withdrawal of the rejections for the reasons set forth below.

New independent claim 16 recites a method of treating filament yarn including, among other things, "introducing a blowing medium into the yarn channel substantially in a direction of the yarn travel direction and at an angle of introduction of more than about 15° and less than about 45° from a direction perpendicular to the yarn travel direction." New independent claim 32 recites an apparatus for treating filament yarn including, among other aspects, a compressed medium feed channel "oriented so as to introduce medium into the yarn channel approximately in a direction of yarn travel through the yarn channel" and "disposed at an angle of greater than about 15 degrees and less than about 45 degrees from a direction perpendicular to the direction of yarn travel or to a longitudinal center axis of the yarn channel." None of the cited references discloses or otherwise suggests at least these respective aspects in claims 16 and 32.

The German '790 reference discloses a synthetic multifilament yarn that is fed from reels 3 through a heater 6, a cooler 7, a false-twister 8, a yarn presence detector 10, an oil bath 14, guides 13, pneumatic jet feed devices 15, and to winders 11, 12. (Abstract). As shown in Fig. 1 and described in the Abstract, air channels 17 are disposed at an angle of 20 degrees relative to a longitudinal axis of a yarn channel 16.

The longitudinal axis appears in the figure to be parallel to the direction of yarn travel through the channel 16.

Accordingly, contrary to the Examiner's assertion at page 5 of the Office Action, the German '790 reference does not disclose either "introducing a blowing medium into the yarn channel. . . at an angle of introduction of more than about 15° and less than about 45° from a direction perpendicular to the yarn travel direction," as recited in claim 16, or a compressed medium feed channel "disposed at an angle of greater than about 15 degrees and less than about 45 degrees from a direction perpendicular to the direction of yarn travel or to a longitudinal center axis of the yarn channel," as recited in claim 32. Rather, the German '790 reference discloses that the air channels 17 are disposed at an angle of 70 degrees from a direction perpendicular to the direction of yarn travel or the longitudinal axis of the yarn channel 16 shown in Fig. 1. Accordingly, the German '790 reference fails to disclose each and every aspect of independent claim 16 or 32, or their respective dependent claims.

LeNoir discloses a process for commingling crimp multifilament yarn wherein the crimped yarn is passed over feeder rolls into a jet commingling device, over forward rolls and lubricating rolls, and finally over a winder. (Abstract; Fig. 1). The jet commingling device introduces air into cylindrical yarn passageway 2 via cylindrical gas passageway 4 of cylindrical tube 5. The cylindrical gas passageway 4 forms an acute angle with the axis of the small diameter segment 3 of the yarn passageway (col. 2, lines 22-33). LeNoir further discloses that "[a]n essential feature of the process of this invention is that at least 90 percent of the yarn treating gas is made to flow countercurrent through the upstream yarn passageway and out the entrance end of said

yarn passageway." (Col. 3, lines 50-53; see also, col. 1, lines 71-72; col. 2, lines 45-47. Emphasis added). Thus, LeNoir fails to disclose or otherwise suggest either "introducing a blowing medium into the yarn channel substantially in a direction of the yarn travel direction," as recited in claim 16, or a compressed medium feed channel "oriented so as to introduce medium into the yarn channel approximately in a direction of yarn travel through the yarn channel," as recited in claim 32. Accordingly, LeNoir fails to disclose each and every aspect of independent claims 16 or 32, or their respective dependent claims.

McDermott discloses an apparatus for interlacing or intermingling filaments by running the filament yarns through a yarn passageway 3 disposed between two abutting members 1, 2. A compressed air chamber 5 is connected via two ducts 6 to the yarn passageway 3. (Col. 1, lines 2-4; col. 2, lines 2-6). McDermott does not disclose a specific angle between the air ducts 6 and the yarn passageway 3. Rather, contrary to the Examiner's assertion at page 5 of the Office Action, the 45 degree angle mentioned in col. 2, line 18 of McDermott refers to the angle between the ducts 6. That is, McDermott explicitly states in col. 2, lines 17 and 18 that the two ducts 6 converge at 45°. Thus, McDermott fails to disclose or otherwise suggest "introducing a blowing medium into the yarn channel. . . at an angle of introduction of more than about 15° and less than about 45° from a direction perpendicular to the yarn travel direction," as recited in claim 16, or a compressed medium feed channel "disposed at an angle of greater than about 15 degrees and less than about 45 degrees from a direction perpendicular to the direction of yarn travel or to a longitudinal center axis of the yarn

channel," as recited in claim 32. Accordingly, McDermott fails to disclose each and every aspect of independent claims 16 or 32, or their respective independent claims.

In the Office Action, the Examiner relies on Sear in combination with either the German '790 reference or with LeNoir, for Sear's alleged teaching of a "baffle/nozzle plate assembly." However, Sear does not remedy at least the above-noted deficiencies of either the German '790 reference or LeNoir, and the Examiner does not assert otherwise in the Office Action. Accordingly, Sear fails to teach each and every aspect of claims 16 or 32, and their respective dependent claims, whether Sear is taken alone or in combination with the other cited references.

Claims 17-31 and 33-42 depend either directly or ultimately from one of independent claims 16 and 32, and are therefore allowable for at least the same reasons that each of those respective independent claims is allowable. In addition, at least some of the dependent claims recite unique combinations that are neither taught nor suggested by the cited references, and therefore at least some also are separately patentable.

Applicant requests the withdrawal of the outstanding objections and rejections, and the timely allowance of the pending claims 16-42.

The Office Action contains characterizations of the claims and the cited art with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action.

In discussing the specification, claims, abstract, and drawings in this Amendment, it is to be understood that Applicant is in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or

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abstract and/or shown in the drawings. Rather, Applicant is entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: January 21, 2004

By: 

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Attachment: Abstract

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